PAN: ABSPU3976C

Original/Duplicate/Triplicate
CONTRACT CERTIFICATE

No. ***Second & Final Bill*** (For Other Works) Date.....2020

Indent No: 34188

Division: **BBMP, Byatarayanapura** Sub-Division: **BBMP, Kodigehalli**

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....

Sub Divisional **Work Code: 008-19-000015, 008-19-000003, 008-19-000017, 008-19-000018, 008-19-000020, 008-19-000021, 008-19-000022.**

Schedule Docket No. Head of Account: **P-3292, P-3293, P-3295, P-3296, P-3298 Est.Cost: Rs. 85.00 Lakhs**

Name of Work (as per sanctioned estimate: Package - 3 including 7 works of Rs. 85.00 Lakhs 1) Improvements to Parks in Kodigealli in Ward No. 08. 2) Providing Borewell nad Pipeline work in Bhadrappa Layout and Surrounding in Ward No. 08 Kodigehalli. 3) Supply of water through water tank at Balaji Layout and Bhadrappa Layout at Kodigehalli in Ward No. 08. 4) Supply of Water through Water tank at Kodigehalli Maruthinagar and BB Nagar area at Kodigehalli in Ward No. 08. 5) Replace of Old UGD Pipeline at Kodigehalli in Ward No. 08. 6) Improvements of Roads and Desilting at Devinagara and Surrounding area at Kodigehalli in Ward No. 08. 7) Providing and fixing CCTV at Block spots in Kodigehalli in Ward No. 08.

Name of Contractor and Full Address: ***Sri B.B. Umesh, No. 385/1, near Anjaneya Temple, Bettahalasur Village & Post, Bangalore - 562157.***

Reference to Agreement No. **EE/BTP/BBMP/WO/185/2019-20** Date: **07.01.2020**

Certified that the measurements were taken by me on 08/09/2020 and recorded of **Pages** 501526 **to** 501550 of measurement Book No. 5016/19-20 and that the work is satisfactorily executed.

Contractor **Officer-in-charge of work**

Certified that the measurement were taken by me on 8/9/2020 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer

Assistant Executive Engineer, Kodigehalli Sub Division, Yelahanka Zone, B.B.M.P., Bengalore.

II Memorandum of Payment

1) Total value of work done or supplies made as per account within
2) Deduct amount to be held in reserve being .....percent Rs.....
3) " Balance
4) Deduct Payment:
   a. Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... adjusted towards cash advance recovery of
   b. Payments Now made { cost store or other material supplied. / recovery of amount creditable to this/other work / Amount paid on this bill Cheque / Cash.
5) Balance being unpaid value of work done held in reserve.
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.
7) Net amount due to or from Contractor unadjustments items.
8) Advance to Contractor for materials brought to site (as detailed) within.
9) Value of Government materials supplied.

Previous → 1st & Final → ITB

Total:	8985640	00
1st & Post Amount	2665440	00
ITB	6320200	00
I+	63202	00
CGST	56431	00
SGST	56431	00
Cess	63202	00
CBF	6321	00
LR	43213	00
	-	
Ded:	288800	00
Chang	60,31,400	00

Total amount adjusted -

P3292 | P3293 Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum (in final settlement of all demands)

ಕಛೇರಿ ಪಾವತಿಗಾಗಿ P3295 | P3296 | P3298 ರಡಿ ಬಿಲ್ಲು ಮೊತ್ತ ರೂ.6320200/- ಗಳನ್ನು ಪಾಸು ಮಾಡಿದೆ. ಕಡಿತ 288800/- ಗಳನ್ನು ಹೊಂದಾಣಿಕೆ ಮಾಡಿ 60,31,400/- ಗಳನ್ನು

(For use in the Office)

Witness
1.
2.

Dated Signature of Contractor

Stamp

FT/WFT/RTGS ಮುಖಾಂತರ ನೀಡಲಾಗಿದೆ

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....

Initials of Officer making payment

Executive Engineer

Sl. No.		Unit
1	Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or P.W.S.S. by vertical electrical sounding by adopting gvenner or schiberger's method, including reconnaissance survey of geological formation, geophysical investigation of existing ground water in the vicinity as quality and acceptability of the users indicating the licating the location of site, recommended depth of 1.0 mtrs in consolidated formation for proper seating of casting pipe, depth of drilling required to cover full depth of acquifer proposed to be tapped, probate yield and other information required including transportation and accessories to work site, engaging technical personal and labour required etc.,	No
2	Sinking borewell of 165mm dia clear using super fast Hydrolic rig of capacity 250 PSIG na above 900 CFM and abaove in all strats including over burden upto 20M. fixing of casing pipes collars and cap with necessary, cutting and threading including transportation of rig and supporting vehicles, crew charges and cost of consumbables etclm complete including yield testing at the final depth with a minimum work in on compression for an hour (excluding cost of casing pipes collars cap etc.,) 0.00 to 50.00 mtrs	Rmtr
3	50.00 to 100.00 mtr	Rmtr
4	100.00 to 150.00 mtr	Rmtr
5	150.00 to 200.00 mtr	Rmtr
6	200.00 to 250.00 mtr	Rmtr
7	250.00 to 300.00 mtr	Rmtr
8	Additional Rate item no.9.1 is allowed for drilling in over burden and fixing casing pipes beyond 20 M (for fixinig casing pipes only (a) Above 20M upto 30 M -15% (b) Above 30M -30% 20.00 to 30.00 mtr	Rmtr
9	above 30.00 mtr	Rmtr
10	Supplying of ISI Mark 175 mm nominal bore, Plain end steel casing pipe - grade of steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments. electric resistance welded steel tube material and confirming to IS 1387/1993 and cmanufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7 mtrs. Both ends threaded confirming to IS 554/1985. one end fixed with socket confirming to IS 4270:2001 and the other end with screwed pipes. All pipes shall be reasonably free from defects. The tubes shall be reasonably straight should be with ISI marking. weighing 25.10kg/mtr. (Inclusive of all taxes and durties) Prices include collar-medium duty.	Mtr
11	Providing and fixing in trenches galvanised / mild steel tubes (medium grade) nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM and testing complete as per specifications.	Rmtr
12	Providing 175mm dia MS cap	Each
13	Supply and drawing 3 core flat sheathed submersible pump cable manufactured with celectrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS 8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts as per 1x3x4 sqmm of 56 strands 0.3mm dia Group A 3Cx4.0Sqmm	Mtr
14	Atalanta, Suguna, CRI KIRLOSKAR and other equipments pumps 10.00 HP/7.5KV(20 stage)	Nos
15	Supplying and fixing wiring earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40mm dia 2.90mm thick GI pipe 2.5mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia	Each
16	Supplying and fixing 20"x20"x2.5" polished wood board made up not less than 15mm thick plank with front plank one end provided for olding at other end fixing the same of the valve using through bolts and nuts	Each
17	Supplying of 1.1 KV LTUG Cable having alluminium conductor PVC insulated extruded inner sheathed , galvanized, steel strip (except 2C X 10sq.mm wire armoured) confirming to IS-3975:1990(No.of Strip indicated in GTP) & extruded PVC outer sheathed armored cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.4 core 16 sqmm	Mtr
18	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe/on wall/on poles as required. In existing trench/duct. 6 sqmm to 16sqmm	Mtr
19	Supplying and fixing of procelin fuse channel with cutouts on existing wooden/panel using necessary nuts, bolts and washers. 63Amps	Each
20	Providing and fixing in position 50mm nominal bore non-return valve vertical type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.	Nos
21	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40-63Amps TPN	Each
22	Cutting of road surface for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc., in the Cement concrete road including cost of materials, labour, HOM complete as per specifications.	Cum

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
2.00	4032.00	0.00	2016.0	0.00	2.00	4032.00	
100.00	32700.00	0.00	327.0	0.00	100.00	32700.00	
100.00	42900.00	0.00	429.0	0.00	100.00	42900.00	
100.00	47600.00	0.00	476.0	0.00	100.00	47600.00	
100.00	50300.00	0.00	503.0	0.00	100.00	50300.00	
100.00	58200.00	0.00	582.0	0.00	100.00	58200.00	
60.00	37500.00	0.00	625.0	0.00	60.00	37500.00	
20.00	1000.00	0.00	50.0	0.00	20.00	1000.00	
62.00	6138.00	0.00	99.0	0.00	62.00	6138.00	
152.00	209456.00	0.00	1378.0	0.00	152.00	209456.00	
660.00	282480.00	0.00	428.0	0.00	660.00	282480.00	
8.00	840.00	-	105.0	0.00	8.00 #VALUE!	840.00	
1495.00	195845.00	0.00	131.0	0.00	1495.00	195845.00	
4.00	207812.00	0.00	51953.0	0.00	4.00	207812.00	
12.00	34032.00	0.00	2836.0	0.00	12.00	34032.00	
14.00	4410.00	0.00	315.0	0.00	14.00	4410.00	
20.00	2920.00	0.00	146.0	0.00	20.00	2920.00	
20.00	220.00	0.00	11.0	0.00	20.00	220.00	
12.00	2916.00	0.00	243.0	0.00	12.00	2916.00	
14.00	19586.00	0.00	1399.0	0.00	14.00	19586.00	
12.00	24156.00	0.00	2013.0	0.00	12.00	24156.00	
75.24	56881.44	0.00	756.0	0.00	75.24	56881.44	

Sl. No.		Unit
23	Earthwork excavation by manual means in hard soil for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edge of excavation with lead upto 50 m. including breaking of clods complete as per specifications..	Cum
24	Supplying PVC ring tight pipes conforming to IS 4985:2000 with latest amendments and conveying to worksite rolling and lowering into trenches laying true line and level and perfect linking at joints testing and commissioning including loading and unloading at both destination and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approval type with all labour with all lead and lift including encasing the pipe alround to a depth of not less than 15 cms with soft gravel or selected earth available from the excavation etc., compelte and giving necessary hydraluic test to the required pressure as per IS (Contractor will make his own arrangement for procuring water for testing)	Mtr
25	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications.	Cum
26	Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications.	Cum
27	Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.	Cmtr
28	Providing and fixing chorinated poly vinyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (internal work exposed on wall) 20mm nominal	Rmt
29	Providing and fixing in position brass bib cock of approved quality nominal bore including cost of all materials, labour and HOM with all leads complete as per specifications. 15mm dia nominal bore	Each
30	Providing and constructing burnt brick masonry for basement and superstructure with approved quality of non-modular bricks of standard size of class designation 3.5Newton per sqm with cement mortar including cost of materials, labour charges, scaffolding, curing complete as per specifications.	Cum
31	Providing 12mm thick cement plaster in single coat with cement mortar, to ceiling including rounding off corners wherever required smooth rendering, including providing and removing scaffolding,cost of materials, labour, curing etc., complete as per specification. cement mortar 1:3	Sqm
32	Lead for disposal of debris shall be payable at carrage rates by mechanical means including loading and unloading From 13.30 Kms	cmtr
33	Supplying ,installation ,Commissioning and Testing CP PLUS 3 MP , 50 meters ip bullet camera,1/3" 3MP PS CMOS Image Sensor,Max 25fps@3MP, 25/30fps@1080P,H.264, H.264H, H.264B , MJPEG dual-codec encoding,DWDR, Day/Night(ICR), 3DNR, ROI, AWB, AGC, BLC, HLC,3.6mm fixed lens (6mm optional),IR Range of 50 Mtrs, IP67, SD Card, PoE,Mobile Software: iCMOB, gCMOB,CMS Software: KVMS Pro, vOptimus Pro inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
34	Supplying ,installation ,Commissioning and Testing CP PLUS 32 Ch. H.265 4K Network Video Recorder Up to 32 channel IP camera input H.265/H.264 dual codec decoding Up to 8Mp resolution preview and playback Max 200Mbps incoming bandwidth Support 4 SATA HDDs up to 24TB, 2 USB(1 USB3.0) HDMI / VGA simultaneous video output Support Multi-brand network cameras ONVIF Version 2.4 conformance Mobile Software: iCMOB, gCMOB inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
35	Supplying ,installation ,Commissioning and Testing Netgear ReadyNAS 4-Bay Diskless Network Attached Storage for Personal Cloud by Netgear inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
36	Providing and Supplying NAS hard disk drives 6 TB inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
37	Supplying ,installation ,Commissioning and Testing D-Link 8-Port Gigabit Switch With 2 Combo SFP Ports inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
38	Providing and Fixing Media converter Giga Dlink inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
39	Providing and Fixing OFC cable single mode 6 core inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	m
40	Providing and Fixing Electrical work for boxes for power supply, fixing PVC Boards with three pin socktes and switches with protection MCB and cabling to street light electrical poles as per the direction of Engineer in Charge	Nos

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
310.07	153484.65	0.00	495.0	0.00	310.07	153484.65	
836.00	63536.00	0.00	76.0	0.00	836.00	63536.00	
150.48	20164.32	0.00	134.0	0.00	150.48	20164.32	
75.24	423225.00	0.00	5625.0	0.00	75.24	423225.00	
50.16	299856.48	0.00	5978.0	0.00	50.16	299856.48	
72.00	12528.00	0.00	174.0	0.00	72.00	12528.00	
60.00	12600.00	0.00	210.0	0.00	60.00	12600.00	
6.48	44375.04	0.00	6848.0	0.00	6.48	44375.04	
86.40	22464.00	0.00	260.0	0.00	86.40	22464.00	
60.00	5700.00	0.00	95.0	0.00	60.00	5700.00	
0.00	0.00	10.00	23046.0	230460.00	10.00	230460.00	
0.00	0.00	1.00	68527.0	68527.00	1.00	68527.00	
0.00	0.00	1.00	266676.0	266676.00	1.00	266676.00	
0.00	0.00	1.00	24805.0	24805.00	1.00	24805.00	
0.00	0.00	1.00	28600.0	28600.00	1.00	28600.00	
0.00	0.00	1.00	11648.0	11648.00	1.00	11648.00	
0.00	0.00	2935.00	172.0	504820.00	2935.00	504820.00	
0.00	0.00	5.00	7800.0	39000.00	5.00	39000.00	

Sl. No.		Unit
41	Providing Cctv MS poles with camera fixing brackets, 5 to 6 mtr height Box inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
42	Providing and Fixing MS Boxes for Poles with rust proof powder coating Box inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
43	Providing Internet charges connecting CCTV with IP Based for one month	Nos
44	Supplying ,installation ,Commissioning and Testing of 43" LED TV – Reputed make Sony/Samsung/LG inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
45	Supplying ,installation ,Commissioning and Testing Server rack 15u Box inclusive of all taxes and transportation charges as per the direction of Engineer in Charge	Nos
46	Consider 6 Loads / Day for 167 Days 6 X 165 = 1002 Loads x Rs. 443.37 = For 1 Load = 2660.20/6	Day
47	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete. I. By Manual Means :B. Cement Concrete Grade M-15 & M-20.	Cum
48	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring,strutting, dewatering, etc. IN ALL KINDS OF SOIL MIXED WITH BOULDERS of 30 cms size, etc. for: Pipes of all dia. for depth upto 2.0 M in all types of soils	Cum
49	Supplying, lowering, laying, jointing, testing and commissioning of Glazed Stone Ware Pipes of following dia, conforming to IS 651:1992,IS 4127 with latest amendments, including conveying to work site, caulking with hemp dipped in tar and jointing with CM 1:1.5 using OPC, perfect linking and curing for 10 days and testing with water etc. with all lead, lifts and as per Technical Specifications. The cost to include the cost of all jointing materials, necessary survey works for laying of sewer lines etc. complete. The contractor will make own arrangements for procuring water for testing. 230 mm dia. pipes	m
50	Labour charges for laying and jointing glazed stone ware pipes of 0.6m length and of specified dia., of tested quality conforming to IS 651 of 1965 including caulking with hemp yarn, jointing with CM 1:2 and testing with water etc. complete for: (Rate to include cost of jointing materials and transportation of pipes from store work site but excluding the cost of earth work) - Glazed Stone Ware pipe of 230 mm dia	Rmt
51	Providing house connection with excavation in all types of soils without damaging the other utilities and supplying and laying 25 mm OD MDPE pipe (PE80) manufactured in accordance with ISO 4427 - 1996 with minimum required strength of 8 Mpa, hydraulic design stress of 6.3 Mpa and with minimum wall thickness of 2.3 mm by making the bore of 15 mm dia. size on the Board's supply mains of 100 mm dia. using drilling bits or machines only and laying the pipe line at a depth not less than 0.45 mtrs. from the road surface, including providing 40 mm dia. "A" class GI pipe as casing over the MDPE pipe from the bore point and upto the entrance of the premises and removing the stone slab covering of the drain and dismantling the size stone masonry wherever necessary and making bore in the wall of the premises. On entering the premises, connection should be continued with 20 mm GI pipe by making "U" shape for the meter point below the ground level by making pit with sufficient space for the easy installation and removal od, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) . ferrule of size 1/2" x 3/4" and fixing the union joint and gate valve / stop cock before the meter point and a reflex valve / non-return valve should be fixed on the connection after the meter point. (All these fixtures should be of standard quality conforming to IS). The compression fittings for MDPE pipes conforming to ISO 14236 and its latest versions. The excavated trench should be refilled with soft selected earth and the dismantled masonry of the drain should be re-constructed with available size stones in CM 1:8 and providing coping in CC 1:3:6 wherever required and the stone slab covering should be refixed in position with pointing in CM 1:3 and also the bored wall of the premises should be re-done to the original position and the rates are inclusive of the cost of all the materials, cement, sand water etc., required for these works. The road suface should be compacted well and brought to the original condition and the excess earth or debris should be disposed off to a distance with an initial lead of 10 Kms. etc. complete for: For minimum length of 2.0 mtrs.	Cum
52	Refilling pipeline and foundation with selected trenches available earth form trench excavation and foundation inlcuding 5 watering, consolidation in layers of 15cms., thickness including disposing off the surplus earth with all leads & lifts.	Cum
53	KSRRB M400-6.1 : Construction of granular sub-base by providing close graded cushed stone aggregates of granite / trap / basalt material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method For Grading-II Material	Cum

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
0.00	0.00	4.00	24440.0	97760.00	4.00	97760.00	
0.00	0.00	4.00	8840.0	35360.00	4.00	35360.00	
0.00	0.00	1.00	3120.0	3120.00	1.00	3120.00	
0.00	0.00	1.00	45760.0	45760.00	1.00	45760.00	
0.00	0.00	1.00	35880.0	35880.00	1.00	35880.00	
0.00	0.00	2004.00	462.0	925848.00	2004.00	925848.00	
0.00	0.00	43.88	727.0	31900.76	43.88	31900.76	
0.00	0.00	195.48	174.0	34013.52	195.48	34013.52	
0.00	0.00	187.20	544.0	101836.80	187.20	101836.80	
0.00	0.00	187.20	113.0	21153.60	187.20	21153.60	
0.00	0.00	50.00	3702.0	185100.00	50.00	185100.00	
0.00	0.00	122.92	65.0	7989.80	122.92	7989.80	
0.00	0.00	25.19	1633.0	41135.27	25.19	41135.27	

Sl. No.		Unit
54	Wet Mix Macadam, Providing.laying, spreading and compacting cushed stone aggregates of granite trap/basalt to wet mis macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of 4 mixed method of tipper to site, laying in uniform layers with paver in sub-base base course on [illegible]ll prepared surface and compacting with bratory roller to achieve the desired density complete as per specifications	Cum
55	Dismantling the damaged or collapsed manhole of 4" dia conical in shape and reconstructing the same with machine made wire 6 brick in CM (1:4) as per design and specification of new cut manhole 4" dia with old frame and cover excluding bed concrete 13.6	Nos
56	Providing and constructing "wire cut brick manhole chambers" using sulphate resistant cement, conical in shape at top with C.C. 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15 m alround the chamber and brick masonry in C.M. 1:4 plaster with wire cut bricks of approved quality and CM plaster 1:3 proportion 12 mm thick inside and outside except for the conical surface outside where the thickness of plaster shall be 20 mm thick, with 1:6 slope in the concrete towards the central drain, finished smooth and fixing of pipes in CC 1:2:4 graded metal of 20 mm and down size including conveying to work spot supplying & fixing SFRC manhole frame and cover confirming to IS:12592 with latest amendments in CC 1:2:4, supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia, Grade Fe-415 steel bar (as per IS 1786) staggered at 30 cms apart as detailed in Technical Specifications and as directed, watering, curring, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, dewatering, engraving manhole No. with flow irection on the inner conical surface etc., as per the drawing with wire cut bricks as per technical pecifications for the following diameters & depths by using Ordinary Port Land Cement. (inclusive of earthwork for all types of soil) (BwsSB SR 2017-18, P-80 I-83) For 1.0 m depth	No
57	For 1.5 m depth	No
58	For 3 m depth	No
59	Disposong off the excess excavated earth of all type up to a distance mentioned Every Km beyond 5 KM 8 Considering 10 Km below by vehicle including loading unloading with all lifts labour HOM of machinery etc., complete	Cum
60	Hire Charges for 2HP dewatering pump to bail out water at leaking pits inclusive of hire charges etc, complete Rs.1300/- per day of 8hours shift per day	Days
61	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum)	Cum
62	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete asper specifications.	Cum
63	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms^thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum
64	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons.	Sqm
65	Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mmand down size graded granite metal coarse aggregates @0.0.69cum and fine aggregtes @ 0.460cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.	Cum

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
0.00	0.00	33.59	1735.0	58278.65	33.59	58278.65	
0.00	0.00	10.00	7652.0	76520.00	10.00	76520.00	
0.00	0.00	1.00	16333.0	16333.00	1.00	16333.00	
0.00	0.00	7.00	22338.0	156366.00	7.00	156366.00	
0.00	0.00	2.00	43414.0	86828.00	2.00	86828.00	
0.00	0.00	72.56	153.0	11101.68	72.56	11101.68	
0.00	0.00	15.00	1352.0	20280.00	15.00	20280.00	
0.00	0.00	116.33	5419.0	630392.27	116.33	630392.27	
0.00	0.00	210.84	262.0	55240.08	210.84	55240.08	
0.00	0.00	26.81	5725.0	153487.25	26.81	153487.25	
0.00	0.00	484.80	395.0	191496.00	484.80	191496.00	
0.00	0.00	63.63	6238.0	396923.94	63.63	396923.94	

Sl. No.		Unit
66	Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.	Tonne
67	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift, transportation etc ,copmplete. (Data Rate)	Sqm
68	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.	Cum
69	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.	Sqm
70	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.43 cum, machine mixed, concrete laid in layers not exceeding 15cms thick well compacted, in foundation and plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum
71	Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications, (which includes cost of gravel / murrum, watering charges & compaction by vibratory roller)	Cum
72	Providing and making precast seating arrangement including excavation laying pcc M15, providing laying M20 concrete for pedestal and seating slab, fixing of seating slab including all necessary bolt and nuts etc, complete and as per the directions of Engineer in-Charge. (Data Rate)	Each
73	Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications.	Sqm
74	Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.	Sqm
75	Fabricating, supplying & erecting M.S. angular Truss for all spans as approved design and drawing. The entire truss is anchored suitably by using 4 Nos. of M.S. anchor bolts at each support, with base plate and shoe plate.The work includes cutting, straightening, placing in position of M.S angle and wleding wherever necessary, and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, & hire charges of machineries for cutting, welding, grinding & erection equipments, etc., complete as per specification.	kgs
76	Supplying and fixing new Mangalore tiles on existing reepers.	Sqm
77	Painting:-Providing and applying two coats of ready- mix paint of approved brand after through cleaning of surface to give an even shade complete as per specifications.Painting on Steel Surface	Sqm
	Total	
	GST @ 12%	
	Grand Total	

CERTIFICATE

1. Certified that the above work done satisfactory and no materials issued from departmentally.

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate Rs. P.	Amount	Qty	Cost	
0.00	0.00	3.18	78232.0	248777.76	3.18	248777.76	
0.00	0.00	190.80	1947.0	371487.60	190.80	371487.60	
0.00	0.00	4.54	5066.0	22999.64	4.54	22999.64	
0.00	0.00	7.56	155.0	1171.80	7.56	1171.80	
0.00	0.00	3.04	5873.0	17853.92	3.04	17853.92	
0.00	0.00	2.29	359.0	822.11	2.29	822.11	
0.00	0.00	10.00	12256.0	122560.00	10.00	122560.00	
0.00	0.00	10.08	1005.0	10130.40	10.08	10130.40	
0.00	0.00	5.04	270.0	1360.80	5.04	1360.80	
0.00	0.00	1659.90	140.0	232386.00	1659.90	232386.00	
0.00	0.00	34.00	449.0	15266.00	34.00	15266.00	
0.00	0.00	45.10	80.0	3608.00	45.10	3608.00	
	2379857.93			**5643065.00**		**8022922.93**	
	285583.00			**677168.00**		**962751.00**	
	2665440.93			**6320233.00**		**8985673.93**	

2665440.00 6320200.00 8985640

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.